APPENDIX 6C MUNITIONS MANAGEMENT DEVICE, VERSION 1 TEST PERSONNEL TRAINING PROGRAM COURSE DESCRIPTIONS

Title: Compliance Training Phase

Length: Variable by course

Course Description: Compliance Training Phase consists of individual courses that satisfy the requirements of 29 CFR (OSHA), 40 CFR (RCRA), 49 CFR (DOT), and Army Regulation 385-61.

Courses:

- \$ Cardiopulmonary Resuscitation (CPR)/First Aid (including bloodborne pathogens)
- \$ 24-Hour Treatment, Storage, and Disposal Facility (TSDF) Hazardous Waste Operations and Emergency Response (HAZWOPER) [OSHA 1910.120(p)]
- \$ TSDF HAZWOPER Annual Refresher
- \$ Research Conservation and Recovery Act (RCRA) Compliance/Hazardous Waste Management
- \$ RCRA/Hazardous Waste Management Annual Refresher
- \$ Hazards Communication (HAZCOM)/Toxic Aid Briefing
- \$ Hazardous Waste Management
- \$ HM 181/126F (Waste Transportation)
- \$ Forklift Training
- \$ Sling/Crane Training.

The courses listed above are described in detail on the following pages.

Title: Cardiopulmonary Resuscitation (CPR)/Standard First-Aid (includes bloodborne

pathogens)

Length: 8 hours

Course Description: This course demonstrates emergency action principles for heart attack, CPR, choking, bleeding and shock, burns, eye and nose injuries, bites and stings, fractures, splints, and poisonings.

Course Topics:

- \$ Bloodborne pathogens
- \$ Wounds
- \$ Shock
- \$ Artificial respiration
- \$ Poisoning
- Burns
- Ill effects of heat and cold
- \$ \$ \$ Bandaging
- \$ Head injury
- \$ Internal injury
- Gunshot wounds
- \$ \$ \$ Infection
- Tetanus
- \$ Animal bites
- \$ \$ \$ Immobilization
- Heart attack
- Apoplexy
- \$ Simple fainting
- \$ **Epilepsy**
- Foreign objects in the eye
- \$ \$ \$ Air passages
- Food passages
- \$ Rescue and transfer
- \$ One-rescuer CPR
- \$ Obstructed airway
- \$ Review.

Instructional Approach:

This course is taught per the requirements and standards of the American National Red Cross and American Heart Association.

Title: Treatment, Storage, and Disposal Facility (TSDF) Hazardous Waste Operations and

Emergency Response (HAZWOPER)

Length: 24 hours

Course Description: This course fulfills training requirements found in 29 CFR 1910.120(p). It provides trainees with the knowledge and skills necessary to respond effectively to MMD-1 emergencies with minimal risk to personal safety and health, and to perform other duties in a safe and healthful manner so as not to endanger themselves or other employees.

Course Topics:

\$ Emergency Response Plan

- Pre-emergency planning and coordination with DPG
- MMD-1 personnel roles, lines of authority, and communication
- Emergency recognition and prevention
- Site security and control
- Evacuation routes and procedures
- Decontamination procedures
- Emergency medical treatment and first aid
- Emergency alerting and response procedures
- Critique of response and follow up
- MMD-1 Standard Operating Procedures
- \$ Personal Protective Equipment (PPE) and emergency equipment
- \$ Procedures for handling emergency incidents
- \$ Procedures for reporting incidents to local, state, and federal agencies.

Instructional Approach:

This course is taught by lecture and includes a field exercise with personnel working in PPE.

Title: TSDF HAZWOPER Annual Refresher

Length: 8 hours

Course Description: This course fulfills refresher training requirements of 29 CFR 1910.120(p). It provides trainees with a review and update of topics covered in the initial course with emphasis on lessons learned and changes to the MMD-1 Emergency Response Plan and MMD-1 Standard Operating Procedures.

Course Topics:

- \$ Review of incidents and lessons learned
- \$ Review of Emergency Response Plan
- \$ New/Revised MMD-1 Standard Operating Procedures
- \$ Review of PPE and emergency equipment
- \$ Changes to Emergency incident procedures
- \$ Procedures for reporting incidents to local, state, and federal agencies
- \$ Review of Carr Facility and Dugway Proving Ground emergency response procedures.

Instructional Approach:

This course is taught by lecture using operational documents as instructional aids.

Title: Resource Conservation and Recovery Act (RCRA) Compliance/Hazardous Waste

Management (40 CFR 264.16)

Length: 8 hours

Course Description: The purpose of this course is to provide the trainee with an overview of the waste management operations (normal and emergency), and the regulatory framework which governs these operations. It also describes facility and job-specific policies and procedures, including: roles and responsibilities, waste handling practices, emergency response and contingency plans, communications and alarm systems, responses to hazardous waste releases, and shutdown of operations.

Course Topics:

- a. Regulatory overview
 - \$ Overview of RCRA and Utah administration rules
 - \$ Structure of RCRA and Utah administration rules
 - \$ Hazardous waste generators
 - \$ Treatment, storage, and disposal facilities (TSDFs)
 - \$ Land disposal restrictions
 - \$ Empty containers
 - \$ Enforcement.
- b. Waste handling operations at MMD-1
 - \$ Operational overview
 - \$ Other hazardous waste management activities
 - \$ Roles and responsibilities
 - \$ Hazardous waste management procedures
 - \$ Documentation requirements
 - \$ Hazardous Waste Manifests
 - \$ Sampling and analytical methods.
- c. Waste handling practices
 - \$ Waste minimization
 - \$ Waste characterization, sampling, and analysis
 - \$ Waste tracking and labeling.

Title: RCRA Compliance/Hazardous Waste Management (continued)

- \$ Waste packaging
- \$ Waste segregation
- \$ Waste disposal
- \$ Empty containers
- \$ Inspections.
- d. Emergency response and contingency plan

- \$ Regulatory requirements for emergency response
- \$ What events trigger a response.
- Emergency planning overview e.
 - \$ U.S. Army, Dugway Proving Ground (DPG), and MMD-1 emergency response
 - \$ Incident classifications
 - \$ Proper emergency response activities.
- f. Emergency equipment, systems, and response procedures
 - \$ Hazardous waste management emergency equipment
 - Communications and alarm systems
 - \$ \$ **Emergency contacts**
 - \$ Evacuation plan
 - \$ Fire response
 - \$ Explosion response
 - \$ Hazardous waste release response
 - \$ Groundwater and soil contamination response
 - \$ Shutdown of operations
 - \$ Temporary (less than 90 day) waste storage areas
 - \$ Miscellaneous issues.

Instructional Approach:

This course is delivered via lecture using slides and other visual materials and equipment, as necessary (for example, maps, containers, labels). Exercises and other trainee activities are incorporated to help ensure learning of the material.

Title: RCRA/Hazardous Waste Refresher (40 CFR 264.16)

Length: 4 hours

Course Description: The purpose of this course is to provide a review of the normal and emergency operations of the MMD-1 waste management activities and of the regulatory framework that governs these operations, which was provided in the introductory course. As such, it will cover the same topics as in the introductory course with an emphasis on new/modified regulations and their impact on operations, any new/modified operations and procedures, and a review of any incidences during the previous year and preventive solutions.

Course Topics:

- a. Regulatory overview
 - \$ Review of RCRA and Utah hazardous waste regulations
 - \$ Structure of RCRA and Utah hazardous waste regulations
 - \$ Hazardous waste generators
 - \$ TSDFs
 - \$ Land disposal restrictions
 - \$ Empty containers
 - \$ Regulatory update.
- b. Review of MMD-1 waste handling operations at DPG Building 3445
 - \$ Operational overview
 - \$ Other hazardous waste management activities
 - \$ Roles and responsibilities
 - \$ Hazardous waste management procedures
 - \$ Documentation requirements
 - \$ Effects of regulatory changes.
- c. Waste handling practices
 - \$ Waste minimization
 - \$ Waste characterization, sampling, and analysis
 - \$ Waste tracking and labeling
 - \$ Waste packaging
 - \$ Waste segregation
 - \$ Waste disposal
 - \$ Empty containers
 - \$ Inspections.

Title: RCRA/Hazardous Waste Refresher (Continued)

- d. Emergency response and contingency plans
 - \$ Regulatory requirements for emergency response
 - \$ What events trigger a response.
- e. Emergency planning overview
 - \$ DPG emergency response plans
 - \$ Incident classifications
 - \$ Proper emergency response activities.
- f. Emergency equipment, systems, and response procedures
 - \$ Emergency equipment
 - \$ Communications and alarm systems
 - \$ Emergency contacts
 - \$ Evacuation plan
 - \$ Fire response
 - \$ Explosion response
 - \$ Hazardous waste release response
 - \$ Soil and Groundwater contamination response
 - \$ Shutdown of operations
 - \$ Temporary (less than 90 day) waste storage areas
 - \$ Miscellaneous issues.
- g. Review of incidents
 - \$ Descriptions
 - \$ Actions taken
 - \$ Preventive solutions.

Instructional Approach:

This course is delivered via lecture using slides and other visual materials and equipment as necessary (for example, maps, containers, labels). Exercises and other trainee activities are incorporated to help ensure learning of the material.

Title: Hazard Communication Training (HAZCOM)/Toxic Aid Briefing

(29 CFR 1910.1200, 40 CFR 311.1, 49 CFR 172.700, and AR 385-61)

Length: 8 hours

Course Description: This course familiarizes the employees with hazards and chemicals they will potentially be exposed to at the work site. It specifically addresses chemical warfare agents and industrial chemicals that will be encountered during the MMD-1 test.

Course Topics:

- \$ OSHA overview
- \$ Container labeling
- \$ Warning
- \$ Material Safety Data Sheets (MSDSs)
- \$ Protective measures
- \$ Chemical warfare agents and industrial chemicals to be used in the MMD-1 test
- \$ Medical effects/potential routes of exposure
- \$ Chemical/physical properties of chemical agents and industrial chemical
- \$ Principles of first aid for nerve and blister agents and industrial chemical casualties.

Instructional Approach:

This course is taught by lecture using slides and other visual materials and equipment, as necessary.

Title: Hazardous Materials Transportation (49 CFR 172.700)

Length: 8 hours

Course Description: This course will provide training to personnel on all aspects of hazardous waste transportation.

Course Topics:

- \$ Shipping papers
- \$ Labeling
- Packaging and marking
- \$ \$ \$ Loading/storage techniques
- Placarding
- Material Safety Data Sheets
- \$ Hazardous Material Incident Reports
- Decontamination.

Instructional Approach:

This course is taught via lecture utilizing instructional aides, as applicable and necessary (for example, equipment, labels, etc.).

Title: Forklift Training

Length: 4 hours

Course Description: This course covers the subject material for those employees required to operate and maintain power trucks (forklifts).

Course Topics:

- \$ Forklift specific features
- \$ Safety
- \$ Fuel handling
- \$ Emergency Procedures
- \$ Fundamentals of operation.

Instructional Approach:

This course is taught via lecture and practical exercise. A driving test is administered to determine the ability to operate the vehicle in its intended fashion.

Title: Sling and Crane Training

Length: 4 hours

Course Description: This course covers the subject material for those employees required to operate and maintain slings and cranes.

Course Topics:

- \$ Safety
- \$ Fuel handling
- \$ Emergency procedures
- \$ Fundamentals of operation.

Instructional Approach:

This course is taught via lecture and practical exercise. An operation/test is administered to determine the ability to operate the sling/crane as intended.

Title: MMD-1 Subsystem Qualification Training Phase

Length: Variable by course

Course Description: MMD-1 Subsystem training covers the operation and maintenance of selected MMD-1 subsystem equipment.

Courses:

- \$ Digital Control and Instrumentation System (DCIS)
- MINICAMS⁷ Operator Training \$
- \$ Depot Area Air Monitoring System (DAAMS)
- \$ \$ Viking GC/MSD Operations/Maintenance
- Hydrogen Monitor
- \$ Liquid/Vapor Sampling Panel
- Monitor Sampling Systems and Laboratory Integration
 - Colorimetric tube
 - Coliwasa/sample scoop
 - Gas chromatograph/Flame Photometric Detector
 - Dynatherm
 - pH analysis
 - Sample preparation
 - Wet chemistry

Instructional Approach:

Conducted by the equipment manufacturer/supplier, consists of demonstration and supervised practice, leading to operator qualification for MMD-1 operators using that equipment. Training is also accomplished by supervisor-led on-the-job training sessions.

Title: RCRA Air Emission Requirements for MMD-1

Length: 8 hours

Course Description: This course will provide an overview of the air emission requirements detailed in 40 CFR 264 and 265 subparts AA, BB, and CC (Utah R 315-7-26, -27, and -30), explain how the requirements are applicable to MMD-1 operations, and present compliance requirements.

Course Topics:

- \$ Introduction
- \$ Subpart AA Process Vents
- Subpart BB Air Emission Standards for Equipment Leaks
 - Applicability
 - Equipment Items Affected
 - Compliance Exemptions
 - Compliance Requirements
 - \$ Leak Detection and Reporting
 - \$ Equipment Design and Operating Requirements
 - \$ Recordkeeping and Reporting Requirements
 - \$ Repair Requirements
- \$ Subpart CC Air Emission Standards for Tanks, Containers, and Surface Impoundments
 - Applicability
 - Components and Areas Affected
 - Exemptions
 - Control Requirements for MMD-1 Tanks
 - Control Requirements for MMD-1 Containers
 - Recordkeeping Requirements
 - Reporting Requirements

Title: Team/System Training Phase

Length: 640 hours

Course Description: This course will train personnel in proper MMD-1 and Building 3445 operating techniques and procedures. Routine, non-routine, and emergency operations, as well as operations in various levels of personal protective equipment, will be reviewed.

Course Topics:

- \$ Overall operational procedures
- \$ Maintenance
- \$ Emergency operations
- \$ Personal protective equipment
- \$ Routine/non-routine operations.

Instructional Approach:

Training will be conducted using simulation equipment test hardware (SETH) to verify equipment training and to validate MMD-1 Operations and Maintenance Procedures, and the test operational procedures developed for detoxifying chemical warfare material in the MMD-1.

Title: Dugway Site-Specific Training Phase

Length: 16 hours (approximate; depending on topic)

Course Description: This course will train personnel in the health and safety requirements specific to DPG as well as specific information needed to function safely and effectively while onsite at DPG. Each topic is a separate class.

Topics:

- \$ Control of Hazardous Energy (Lockout/Tagout)/Other Employees
- \$ Electrical Safety Training Unqualified Employee
- \$ Hazardous Communications Specific to DPG
- \$ Portable Fire Extinguisher/Training and Education.

Instructional Approach:

This course is taught via lecture using overhead slides, video tapes, handouts, demonstrations, and class questions and answers.